

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

## Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

## **About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

18 42 //6

a39015 00018173 8b



# STATE OF IOWA

1916

# REPORT OF THE STATE

# Fish and Game Warden

FOR THE

Biennial Period, Ending June 30, 1916

E. C. HINSHAW, WARDEN SPIRIT LAKE

Published By
STATE OF IOWA
Des Moines

D. of D. DEC 27 1917 ONIVERSITY OF STREACO ILIBERATE 266892 MARCH 1930

## LETTER OF TRANSMITTAL.

Geo. W. Clarke, Governor.

Sir: In conformity with law, I herewith submit the Twenty-second Biennial Report of the Department of Fish and Game, covering the period from July 1, 1914, to July 1, 1916.

E. C. HINSHAW,

State Fish and Game Warden.

## FISH AND GAME DEPARTMENT.

State Fish and Game Warden .....E. C. Hinshaw, Spirit Lake

### ASSISTANTS.

W. E. Albert, Lansing R. T. St. John, Riceville Chas. S. Hobson, Clarinda W. Allen Roe, Des Moines

## J. E. Waterhouse, Charter Oak. DEPUTIES.

J. J. Armstrong; Mt. Ayr. H. J. Atkinson, Red Oak Walter Baber, Des Moines Theo. Bauer, Dubuque A. C. Babcock, Sabula W. H. Blackburn, Jefferson B. E. Bucknell, Decorah Wm. Benton, Cedar Rapids H. W. Burke, Muscatine Fred Brown, Sibley E. L. Breitenbach, Keota A. R. Castle, Britt A. C. Christensen, Ruthven S. W. Clark, Curlew

Ed. Chapman, Waterloo G.B. Coon, Albia Robert Curran, LeMars Lee Doolittle, Ames

D. H. Eyler, Clarion W. S. Elerick, Keosaugua James Folck, Onawa

D. F. Fuller, Storm Lake E. B. Fisher, Troy Mills

W. A. Gordon, Seymour R. W. Gordon, Belle Plaine

T. L. Hall, Glenwood

J. Heffelfinger, Grundy Center P. L. Hartsough, Oelwein

L. Hinshaw, Arnold's Park L. C. Hodson, Indianola

Herman Johnson, Doon Frank W. Klauer, Davenport

H. A. Kline, Spencer C. G. Lake, Chester

W. C. Laraway, Hamburg

J. A. Lang, Algona

T. J. Lancaster, Maquoketa

J. D. Loudon, Creston

H. E. Martin, Iowa Falls

R. P. Monplasure, Mason City

N. Muncy, Iowa City Chas. Metcalf, Albion

Wm. Middendorf, Fort Madison

Clint Milthrop, Chariton

D. N. Nelson, Spirit Lake

T. D. Nierman, Avoca

Oscar Olsen, Eagle Grove

L. C. Preussner, Manchester

Geo. Payton, Centerville

D. V. Palmer, Lake Park W. J. Pullen, Estherville

W. E. Parnell, Ottumwa

W. H. Potthast, Manning

Henry F. Reichmann, Keokuk

J. M. Ramsey, Clarksville

Chell Ross, Correctionville

J. C. Schroeder, Emmetsburg

L. Stanley, Adel

Chas. Spencer, Lake View Chas. A. Smith, Sioux City

W. J. Smittle, Council Bluffs

A. C. Scott, Osceola

Wm. Shinkle, Dakota City

Fred Sandham, Rockwell City

J. L. Tierney, Clinton

O. Wiland, Harlan

Earl J. Willis, Riceville

Jas. H. Wright, Menlo

M. C. Wheeler, Forest City

D. W. White, Atlantic

O. I. Wilson, Charles City

H. W. Wilson, Audubon

C. C. Wright, West Union

J. A. Wilson, Oskalooosa

# REPORT OF THE STATE FISH AND GAME WARDEN

### IOWA LAKES.

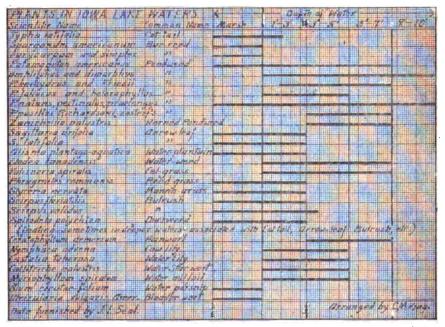
In our last report we pointed out the reason why no more of of Iowa's lakes should be drained; that every one of them, regardless of how much of a slough they might be, could be made ideal recreation places for the people of the state. We also called attention to the fact that arrangements were complete to employ an expert engineer to take charge of the work of improvement, and that machinery would soon be purchased for the purpose of deepening the shallow lakes, and dams would be built to raise and hold the water to the proper height, where needed.

It was necessary to secure some legislature to enable us to properly carry on this work. The last legislature passed a law which prohibited the draining of any lake belonging to the state, and made provision for the Highway Commission to make a survey of every meandered lake in the state and report to the next legislature. This left the matter where we did not feel like going ahead with our proposed improvements until the Highway Commission had made their report, and recommendation, as provided for by the legislature, so we have not purchased the machinery and have only done such improvement work as had already been started, which was the building of a dam at East Lake in Wright county, one at each of the Twin Lakes in Calhoun county, and rebuilding dam at Silver Lake in Palo Alto county. We have rendered the Highway Commission all possible assistance in their work, gathering data and making surveys of the lakes, and have been in touch with them during the entire time and know their work has been as thorough as it was possible to be in the length of time they had and facilities for doing the work.

I heartily recommend that the next legislature provide ways and means for the preservation and improvement of every lake in the state. No lake should be drained, at least until the proper experiments have been conducted for their improvement. If it is found that certain lakes cannot be improved and it should be the wish of the people in the locality where such lakes are located that they should be drained, the state will not have lost anything by delaying the drainage a few years. I am confident, however, that there is not a community where one of the lakes are located

that will want their lake drained after they once see what can be done by way of improvement.

Let me repeat what I said two years ago, that more pounds of rish can be raised in an acre of proper water than it is possible to raise pounds of beef on the best lands that Iowa affords. These fish are worth more per pound than beef, and this does not take



PLANTS OF THE LAKES.

The accompanying chart was prepared by Miss Charlotte M. King from notes made by Mr. J. L. Seal on the depth of water in which different aquatic plants occur. The most obvious plants commonly seen in shallow water are the bull rush (Scirpus validus), cattail (Typha latifolia), arrowhead (Sagittaria variabilis) and greater bull rush (Scirpus fluviatilis). The pond weeds (Potamogeton sp) mostly occur in deeper water. These most persons do not see and hence they are not mentioned when speaking of objectionable plants of the lakes. The duck weeds are associated with the rushes and cattails; they are rather common in some of the lakes. They do not give rise to any of the disagreeable odors. The disagreeable odors largely come from the decomposition of the blue green algae. These floating small plants occur in the deepest water. The only way to prevent this condition is to treat the water with a weak solution of iron sulphate or copper sulphate. Investigations show that by increasing the depth of the water a few feet the unsightly plants can be largely eliminated.

into consideration the recreation, which is much more valuable than either the fish or beef and cannot be figured in dollars and cents.

Let us not forget, in our mad rush for land to raise corn, that there are other things that count beside the almighty dollar. Let us preserve our lakes; let us improve our lakes; let us provide parks around each lake, where the people can go for picnics without trespassing; let us provide such places in that part of the state where there are no natural lakes by building dams, etc., and creating small lakes. Why it is we have not had more support in our efforts along these lines. May be it is because the people haven't understood. Let us all get busy and then these things will come and come easy.

If some of the people who are so anxious to drain lakes will investigate some of the lake beds that have been drained for several years and find that they are nothing more than swamps and are absolutely worthless for agricultural purposes, and talk with the farmers who have been forced to pay large sums of money for imaginary benefits, they will not be so strong for lake drainage. Let the legislature make provision for the improvement of lakes and see how fast the sentiment grows in each community to have their lakes improved.

The greater lakes of the State, including the Okobojis, Spirit Lake, Clear Lake, Wall Lake in Sac County, and others that have been used as resorts by thousands of people for years, have never received any state aid or assistance.

It is a disgrace to a State like Iowa to have such beautiful lakes within her borders and give them no attention, or make any provisions whereby the public can enjoy them without trespassing. The State should purchase NOW suitable parks around every lake in Iowa and provide highways to these lakes for the benefit of all the people. There are several places around the great lakes now where there is no opportunity for the public to get to the lake shores for the purpose of hunting, fishing, bathing or picnicing, without being ordered off by the land owners. Let us talk CONSERVATION, PRESERVATION, AND LAKE IMPROVEMENT.

## PRESERVE PILOT KNOB.

Few people know that four miles east of Forest City, near the four corners of the Counties of Hancock, Cerro Gordo, Worth and Winnebago, lies one of the real beauty spots of Iowa, and while we are talking of conserving some of these places let us not overlook Pilot Knob.

Pilot Knob rises up from a level fertile prairie to a height of 1,630 feet above the sea level, and about 300 feet above the sur-

rounding valley. It covers in all above 400 acres. Some of the most beautiful native timber in the State is to be found there; small patches of native grass; the native prairie lilies and a number of flowers and plants that are only a memory to the early settlers. At the top of the foot-hills is found a beautiful lake, surrounded with fine timber and fine sand beaches. Two kinds of water lilies grow in the water, which is of sufficient depth to make an ideal bass lake.

Iowa should buy Pilot Knob. A part of the purchase price could well come from the hunters' license fund, as it would be an ideal game reserve.

### PROPOSED LEGISLATION.

In our recommendation to the legislature two years ago we proposed several small changes in the Fish and Game Laws. Several of the recommendations were enacted into law, but on account of the lack of knowledge concerning these matters there was considerable legislation proposed by different interests that would work to the detriment of the cause in general. Rather than have undesirable legislation passed we did not push some of the important legislation that should have been passed. And we now recommend that the legislation advocated two years ago, which was not enacted into law, be passed by the coming legislature; the most important of which is:

All confiscated property should be sold and the proceeds placed in the Fish and Game Protection Fund, instead of paying the defendants' costs. and to the School Fund.

The law should provide for the taking of carp, buffalo, suckers and other non-game fish by the Commission and sold at the market value. The proceeds, after paying costs of catching, selling and necessary expense connected with the work, should go into a fund for the benefit of the river or lake from which the fish were taken, to be used for re-stocking such waters with game fish or improvements, to make such water more desirable for the people.

Provision should be made to give the Fish and Game Warden more authority to establish game preserves and provide a more severe penalty for hunting thereon.

The hunting license law should be amended so as to include fishing. This would create a fund sufficient to improve every lake in the State; make lakes in that part of the State where there are none; enable the department to keep all waters of the State stocked with game fish; establish public parks around all the State lakes, and along all meandered streams. This law should not include women, or boys under fourteen years of age. This license would then entitle the holder to hunt and trap fur-bearing animals, or fish, one year during the open season for one dollar.

### NATIONAL LAW.

On account of the unsettled condition regarding the National Law regulating the killing of ducks, etc., we do not care to make any recommendation in regard to changing our state laws at this time. Before our next legislature meets the government may have this law in such shape that something definite can be figured from it, and we will make such recommendation as may seem proper and best at that time.

## PHEASANTS AND PARTRIDGES.

The closed season for the killing of Ringneck Pheasants and Hungarian Partridges should be extended two years.

## WARDENS' SALARIES.

The salaries paid the Fish and Game Department are not sufficient to demand the best service. The deputy wardens, who do their duty, and certainly entitled to more than \$2.50 per day when common labor is bringing more pay than is paid men of this kind. A deputy warden should receive from \$2.50 to \$4.00 per day, depending on their length of service and in accordance with results accomplished; to be regulated by efficient service.

The number of assistants should be increased from three to six, at salaries of \$1,800.00 per year. The above change in our laws would reduce the cost of law enforcement, as service would be demanded in accordance with salaries received, which would mean better service and less men, therefore, less traveling expenses. A chief deputy should be provided for the assistance of the warden in the office. The enormous amount of office work and the ability required is not obtainable for less than \$1,800.00 per year.

The warden's salary is not in accordance with the work we are doing and the responsibility that we assume, and should be raised to \$3,000.00 per year.

### MINNOW SEINES.

The law should be amended to allow the use of 30 feet minnow seines in lakes, as it is impossible to secure minnows for bait

in the lakes with less than 30 feet of net. No fish of consequence can be caught with such seines, therefore, no harm could be done.

## THE FARMER AND SPORTSMAN.

We have often said that the sportsmen were the men who had given bird life all the protection they ever had. I mean by this, that all laws for the protection of wild life, was enacted through the activity of the sportsmen. Practically all the assistance given the officers to enforce these laws comes from the sportsmen. So, without their activity for such laws and their enforcement, Iowa would have no means of enforcing such laws as she might have.

When we use the word sportsmen it is taken to mean every man that hunts and fishes, and we find certain farmers who are lead to think of the city sport or the fellow who has done damage to crops or property of the farmer. The word sportsmen, as we use it, does not apply to any certain class of people or any certain occupation, but applies to any person who loves to hunt or fish for the recreation or sport, rather than the commercial value of the fish and game he secures, and who does not violate the laws for protection of fish and game, but does assist in protecting fish and game during closed seasons, and under no circumstances does any damage to any one while hunting or fishing.

There are just as many good sportsmen among the farmers as there are among any people. Some of the leading sportsmen of Iowa are farmers. There seems to be a feeling among certain farmers that the fish and game department is their open enemy, when the facts are, it is one of their best friends, if they are for just laws and law enforcement. The men that damage crops, fences, shoot stock or poultry, are the men that this department has its trouble with. These men are not sportsmen, nor are they law abiding citizens. They violate the fish and game laws whenever opportunity presents itself.

We arrest and prosecute about four hundred men each year, and among such men you will find our bitterest enemies. What is needed is cooperation between the loyal sportsman, the farmer and this department. The three working together can, to a considerable extent, eliminate a large per cent of lawlessness by the law violator. The man who complains about law violations does not get far if he is a law violator. For instance, a short time ago a certain man made complaint that three certain men were violating the law and offered to furnish evidence. Information was filed,

and the case set for trial. Before trial the men who were arrested went to the man furnishing evidence and said: "If you testify against us we will furnish evidence against you." The facts were that the man making the complaint had a large fish seine, and had used it often in violation of the law. Our evidence fell down at the trial and we lost the case. This is too often the case. Men who violate the fish and game laws regularly complain about other people violating the law.

## QUAIL.

The prospects at this time are that a large number of quail will be raised this year. Weather conditions are more favorable than last year. Quail are quite plentiful where conditions are favorable, but unless the natural cover is to be had they do not live through an ordinary winter, but where they do have the proper cover they will live through all except the extreme winters. By providing feed and shelter we have saved thousands of quail from starving and freezing. A fat quail that has good shelter seldom dies from the cold. It is the quail that has not had proper feed, gets poor and loses their vitality that die. The game reserve plan when fully carried out will save thousands of birds for restocking the State after extreme hard winters.

There are a few who still advocate the indefinite protection of the quail. This agitation does not come so much from people who have personally investigated the question as it does from those who are still willing to quote some sentimentalists or fanatics who have allowed their prejudice to carry their statements so far beyond any reasonable facts that no person who would give the subject serious thought would care to be quoted as upholding such unreasonable statement. For instance, after years of study and thousands upon thousands of quail have been killed for the purpose of examination, we find that they destroy eighty-five different weed seeds. Ragweed and pigweed are among those that the quail destroy in large numbers. Also large numbers of insects, all of which are true statements and are the actual findings by those who have made the examinations, but now comes the exaggeration. A ten cent piece is made to look like—from \$5.00 to \$25.00, according to some of our most learned experts, and right here is where some of our progressive farmers and thinking men do some figuring of their own. They take the number of pigweed seed, for instance, that a quail destroys, they divide the number of

seeds that one plant will produce and they find that a single pigweed plant will furnish feed for a quail several days, then they take the number of quail that it would take to make a noticeable difference in weeds on their farm and find that it would require an unthinkable number to do the same amount of weed destruction that a dollars' worth of cultivation would do.

Then the insect question comes in for some reasoning. There are those who remember the early days when the birds had not been destroyed by any unnatural cause, and the early settlers were driven out by the grasshoppers, the locust, etc. Then as the country finally settled up the birds commenced to disappear and also the grasshopper and other insects. Then what does it all mean? It simply means this, that birds do destroy insects, but in such small numbers in proportion to the number of insects in existence that the decrease in birds has no noticeable effect on insect life, and there are other reasons, many of which we cannot explain here on account of space. A few will suffice.

The world was created on the plan of the survival of the fittest, which is practically true of all living things. Bug and insect life prey upon each other. The larger bugs and insects prey upon the smaller and weaker. What has this to do with the quail? It has this, the bugs and beetles found in the quail's crop would have destroyed thousands of small insects had the quail not destroyed them.

When this question is sifted down there is very little left except sentiment, for if the work was really done in the interest of the farmer and fruit grower, there are a number of very important things that would not be overlooked, among which is the common grassfrog and common toad. Investigation proves than an ordinary sized frog or toad will destroy as many insects as a quail. A hen with a brood of chickens will destroy more bugs than the same number of quail. A young duck will destroy two bugs to a quail's one.

The chickens and the ducks have a commercial value to the farmer, beside the benefit derived from insect destruction. So, if we will broaden our vision we will soon discover the world is larger than we thought and that there are other things of importance besides the one we have been looking at all these years. From a standpoint of sentiment every person has the right to their own opinion, but it is hard to understand why it is necessary to make some parts of this world better than God intended.

Now we do not wish this article to be understood that quail has no economic value, because they have. But what we want understood is this, that the economic value of the quail is only a small per cent of what has been claimed for him. He fits in nicely with the laws of nature and earns his living and when that is said the whole truth has been told.

Then let us discuss the quail's value as a game bird. person that is normal has some favorite recreation. Golf, tennis, fishing, hunting and hundred of other sports. The golf player is willing to spend quite a sum of money so he can have his recreation. So with the hunter. He does not figure the commercial value of the game he gets, it is the recreation that is given consideration, which cannot be figured in dollars and cents, so if we take the quail from the game bird class we have robbed thousands of people of this favorite recreation, we have reduced the revenue from the protection and propagation of fish and game at least \$30,000.00 per year. We have taken from the quail the protection they receive during the entire year, except six weeks of open season. We have stopped the progress of the game reserve plan, which is working out to the best advantage of bird life of anything that has been tried. We have left the quail to their own care during the hard winters, which kills practically all of them, except such as are given food and protection. We have done in this State what was done in other states, protect the quail by law, but allow the law violator to kill them on account of lack of funds to enforce the law.

No, the quail should not be taken from the game bird class. The law now provides that the land owner can protect them if he so desires. Our season is short, our bag limit small, and in a state like Iowa, which is not a quail state, we have as many birds now as we would have in five years, should they be given entire protection by law.

### HUNGARIAN PARTRIDGE.

We made the statement in our report two years ago that the partridge was the best game bird to stock Iowa with. After watching them closely since that time we find no reason to change our mind.

The war has prevented us from securing any more of these birds as they are imported from Europe, and cannot be raised in captivity. The total number of these birds liberated in four years is 5,450, or one pair for about every twenty sections of land. From reports received they have increased at least five to one. They are much more inclined to stay in seclusion than the ringneck pheasant. We know of cases where a pair has nested and no one has ever seen them more than once or twice a year. So it is very difficult to estimate the number of birds in the State. If these birds are to be had at the close of the war, we are strongly in favor of purchasing at least ten thousand and give them a thorough trial.

### RINGNECK PHEASANTS.

During the last four years there has been distributed in the State of Iowa about 12,000 pheasants, 3,000 of which were distributed this year, and have had no opportunity to increase. We still hear people say they are a failure and that nothing has or will come from stocking the State with these birds, but such is not the fact. These birds have shown a good increase wherever they have received the proper protection and while there are places where these birds have been liberated no increase is shown and in some cases they have practically disappeard, due to the following reasons, mostly: Lawless hunters; vermin, such as wolves, fox, skunks, etc.; also, hawks and crows; being dissatisfied with their location and scattering to other localities.

The ordinary person doesn't realize what it means to stock a state like Iowa with birds. Twelve thousand birds sounds like an enormous amount, but stop to figure—it means one pair for each ten sections of land in the State. Then, is it surprising that they are not often seen, and although our census shows at least 60,000 pheasants, or an increase of five to one, there is still two sections of land to each pair of birds.

Don't get discouraged because you do not see these birds often, don't keep on saying that the experiment is a failure, for every time you do you are liable to cause some fellow to shoot the first one he sees on the theory that it will do no harm as they will not amount to anything, because—some one said so.

If you want proof that these birds are doing well advise us, and we will tell you where you can go and see them for yourself. We expect to buy a good farm and establish an up-to-date game farm and raise from 25,000 to 30,000 birds each year. And in two or three years an open season can be had for male birds only, as by killing off a large per cent of the male birds it will be bene-

ficial to production, as too many males are not desirable. They fight, break up nests, and in some instances kill the young. Cold weather has no terror for pheasants. All they need is plenty of feed and they will sit on a snow bank and crow when the thermometer is twenty degrees below zero.

If the people will do their part by assisting us to protect and feed these birds, also assist in killing the vermin, Iowa will soon have thousands of ringneck pheasants.

## IOWA'S NEW FISH HATCHERY.

The new fish hatchery at Spirit Lake, when completed, will be one of the best in the United States. The new building (shown on another page) is complete, is 32 feet wide, 60 feet long. The main building is 12 feet high with two upper rooms, 12x20 and 11 feet high, built of matt face press brick, which cost \$24.00 per M., which are laid one-half inch open joint with colored mortar to match brick, making not only a substantial building, but one that adds beauty to the entire hatchery grounds. It is equipped with hot water heating plant, electric lights, a thirty thousand gallon steel water tank, one oil centrifugal pump (capacity 150 gallons per minute), and one electric motor driven centrifugal pump (150 gallons per minute). Water is taken from Spirit Lake, a distance of about 500 feet. Hatchery equipment consists of 270 seven-quart hatching jars. Each jar will handle four quarts of eggs. Pike eggs run 175,000 to the quart, making the capacity of each jar 700,000 eggs, and the capacity of entire equipment 189,000,000.

The only difficulty in having all the pike the Iowa waters will accommodate is to secure the eggs. This year was a very bad time to secure eggs on account of unfavorable weather conditions. The Okobojis and Spirit Lake are the only waters in Iowa where pike eggs can be secured, and the number of fish in these waters is not sufficient to enable us to get eggs in large quantities, but in a few years the number will increase so the hatchery can be filled to its capacity each year. We were only able to secure about 45,000,000 eggs this year, from which 26,000,000 fish were hatched.

We are making application for the lake trout eggs from the government, which will be hatched during the winter.

The ponds, when completed, will cover twenty-five acres. The water supply is obtained by running a pipe to Spirit Lake, it being higher than the ponds gives a flow of water through the center of each pond. These ponds will be used for hatching black

bass, croppies and sunfish, and for maturing some of the fish hatched in the building. High water has so delayed the construction of these ponds that we will not be able to complete them this year.

### RESCUING FISH.

It will be noticed by this report that each year we are able to save more fish from dying in the sloughs. We are often criticised for allowing fish to die, where they could be taken to live waters, but when there are fish scattered over thousands of miles, it is impossible to know where they all are and is impossible to rescue them with the means we have for doing the work. While we are criticised for allowing fish to die in one place we are rescuing a million in some other place. We are getting this work in hand better every year, as this report will show.

### THE BULLHEAD.

While the bullhead fish is a very desirable fish for our smaller waters they are a menace to our great lakes. The average person that catches them throws them back into the waters. We have not classed them as a game fish and they have been caught in considerable numbers for market, but they continue to increase and there are endless millions of them. During the season when the game fish are small they destroy endless numbers. They also destroy the spawn of such fish as the yellow perch that spawn in a ribbon.

The law should allow the warden to make provision for reducing these fish by catching them and placing them on the market for people to eat, the proceeds to be used for restocking the same waters with desirable game fish. This would eliminate the large number of tramps and undesirable citizens that congregate around these places and fish for market and cause the department continued annoyance by their illegal fishing.

## DISTRIBUTION OF FISH.

# Statement of Fish Distribution and Output of the State Fish Hatchery. 1914.

	1914.		
Place	Waters	Number	
Okoboji	Lake Okoboji	55,00	
Plicades	Turkey River	80,00	
	Otter River	20,00	
Marshalltown	Iowa	80,00	
T Tampton	Oedar	20,00	
	Yello	80,00 5.00	
Postville	Turkey	5,00	
TA Abbinson	Turkey	5.00	
n_(1)_(1)_	Turkey	5,00	
	Beaver.	80,0	
	Oedar	50,0	
	City Lake	10,00	
	Summit Lake	10,00 10,00	
Oreston	Squaw	10,00	
Orning	Nodaway	5.0	
Villisca	Nodaway	5.0	
nad Oak	Nishnabotna	5,0	
Uastings	Nishnabotna	5,0	
	Raccoon	5,0	
Gaan Danide	Raccoon	5,0	
	Nishnabotna	2,0	
Tanlan	Nishnabotna	2,0	
Manufacture	Nishnabotna Nishnabotna	2,0	
Manilla	Lake Manawa	2,00 30,00	
Oouncil Bluffs	Boyer	2,0	
Arion	Clear Lake	50,00	
Deluit Taka	Spirit Lake	50.0	
Omerwa	Blue Lake	50,00	
Pmmetshnrø	Medium Lake	20,00	
Dathwan	Lost Island and Trumbull Lakes	80,0	
Monticello	Maquoketa River	40,0	
Ottumwa	Des Moines	50,0	
Decorah	Raccoon	40,00 40,00	
Adel Olear Lake	Clear Lake	20,0	
Okoboji	Okoboli Lake	50.0	
OKODOJI	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Total		885,00	
	1915.		
Webster City	Boone	40,0	
Waterloo	Cedar	40,0	
Humboldt	Des Moines	25,0	
Fraer	Buffalo Creek	20,0	
Ulear Lake	Clear Lake	82,0 5.0	
Des Moines	Des Moines River	40,0	
Jolley	Twin Lake	82,0	
Storm Lake	Storm Lake	82.0	
Fonds	Fonda Lake	5	
Panora	Middle Coon	85.0	
		82,0	
lowa Falls	lows baver	00.10	
Iowa Falls Lake View Manchester	Iowa River Wall Lake Pickerel Lake	20,0	

## FISH AND GAME DEPARTMENT

## DISTRIBUTION OF FISH-Continued

Place	Waters	Number
Olarion	Elm Lake	84,000
Orystal Lake	Elm Lake	84,000
Mt. Pleasant	Skunk River	88,000
Fairfield	City Reservoir City Reservoir City Reservoir	8,000
Albia	City Reservoir	10,000
Chariton	City Reservoir	80,000
Olin	wainut kiver	80,090
Oxford Junction	Wapsie River	20,000
DeWitt	Silver Creek Shell Rock River	50,000 <b>30,00</b> 0
Clarksville	Coder River	15,000
Vinton	Oedar River Cedar River Iowa River Skunk River	40,000
Tama	Iowa River	50,000
Oskaloosa	Skunk River	30,000
Reinbeck	Black Hawk (?reek	8,000
Eldora	Iowa River	22,000
New London	Olty Lake	30,000
Iowa City	Iowa River	30,000
Eagle Grove	Boone River	20,000
Goldfield	Boone River	40,000 20,000
West Union	Turkey River	20,000
Waucoma	Turkey River	20,000
McIntire	Turkey River Wapsie River Wapsie River	20,000
Brownsville	Wansie River	20,000
Little Cedar	Little Cedar River	20.000
Little Cedar Clear Lake	Clear Lake	40,000
Sac City	Boone River	60,000
Oelwein	City Lake	40,000
Maynard	Volga River	10,000
Postville	Yellow River	50,000
Maquoketa	Maquoketa River	50,000
Ionia Nashua	Little Cedar Little Cedar	45,000 15,000
Nashua Oreston	Summit Lake	50,000
Red Oak	Nighnahotna	50,000
Lake Park	Silver Lake Lake Manawa	40,000
	Lake Manawa	20,000
Glenwood	Glenwood Lake	25,000
Total		1,642,000
Total biennial period		2,477,500
	CHED AT SPIRIT LAKE HATCHI	
		4 000 000
	Spirit Lakes	4,000,000
Eggs received from U. S. Ha	tcheries	8,000,000
Total number of eggs		12,000,000
	Spirit Lake eggs	2,000,000
	t eggs	8,000,000
rish hatched from Governmen	——————————————————————————————————————	8,000,000
Total hatch		10,000,000
	1916.	40.000.000
	Spirit Lakes	19,075,000
Green eggs received from Gove	rnment	30,000,000
Total number of eggs		49,075,000
	l Spirit Lake eggs	14,000,000
Fish hatched from Governmen	eggs	12,100,000
Total hatch		26,100,000

# DISTRIBUTION OF PIKE FROM SPIRIT LAKE HATCHERY.

#### 1915.

East	Okoboji Lake	4,000,000
West	Okoboji Lake	2,250,000
Spirit	Lake	2,250,000
Clear	Lake	1,250,000
Kept	in pond for experimental purposes	250,000

10,000,000

#### 1916.

East Okoboji Lake	6,000,000
West Okoboji Lake	11,000,000
Spirit Lake	6,000,000
Clear Lake	2,000,000
Twin Lakes (Calhoun County)	300,000
Lost Island Lake	300,000
Storm Lake	500,000
•	

26,100,000

# FISH TAKEN FROM SLOUGHS AND BAYOUS AND PLACES IN LIVE WATERS.

## GAME BREEDER'S LICENSES ISSUED.

Νo	Name	Town	County	Amount
1	Wm. Benton	Cedar Falls		\$ 2.0
2	R. B. Schaal	Des Moines		2.0
8	D. A. Willis	Muscatine		2.0
4	F. E. Ristrim	Stanhope		2.0
5	G. E. Linebarger			2.0
6	B. N. Dickman	Charles Oity		2.0
7	John Reinhart	Spirit Lake Le Mars		2.0
8	John Didier	Le Mars		2.0
9	W. R. Hinde	Early		2.0
10	H. C. Kassel	Calamus		
11	A. J. Graves	Ocheyedan		2.0
12	Matt Barron	Mason City		2.0
18	Guy M. Gillette	Unerokee		2.0
14	Mrs. O. W. Morris	West Liberty		2.0
15	R. E. French	Estherville		2.0
16	Fred E. Helleman	Fort Dodge		2.0
17	Wm. J. Eder	Lost Nation		2.0
18	G. W. Flindt	Estherville		2.0
19	W. W. Kickles	Iowa Falls		2.0
20	V. L. Brown			2.0
21	Jas. P. Donahue			2.0
2	John M. Doyel	Panora		2.0
28	W. P. Weary	Sac Olty		2.0
28 24	Dan O. Oroot	Kellogg		

## GAME BREEDER'S LICENSES ISSUED-Continued

No	Name	Town	County	Amount
25	E. L. Graves	Jamaica		2.0
26		Lohrville		2.0
27	Mrs. C. B. McClelland.	Cedar Rapids		
28	Blain Marrington	Nemaha		2.0
29		Dubuque		
30 I	Earl McNett	Ruthven		2.0
31 I	A. E. Carty			
32	Curtis F. Ferree			
33		Charles City		
<b>4</b>		Kenwood Park (Linn Co.)		
5	Tom Glass			2.0
8	J. W. Zeigler			
7	L. L. Patton			
ś	F. L. Reinhard			
89	M. S. Gole			
ю	Joe F. Nolan			
1	E. W. Henke			
2	Fred Hahne			
3	8. Lord			
4	8. G. Smith			
15	O. W. Smith	Hopkinton		2.0
16	Sam Utne	Le Mars	{	2.0
7		Nevada		
8	R. T. St. John	Riceville		2.0

# CERTIFICATES ISSUED FOR THE COLLECTION OF BIRDS FOR SCIENTIFIC PURPOSES.

### 1914-15

Rush R. Gabrielson, Sioux City Samuel F. Foft, Waukee L. A. Tope, Clearfield R. E. Harbert, Shellsburg Ira N. Gabrielson, Marshalltown Alfred M. Bailey, Iowa City B. H. Bailey, Cedar Rapids Wesley Kubichek, Iowa City D. H. Luckenbill, Mediapolis Homer R. Dill, Iowa City Prof. Joseph Steppan, Des Moines B. Dean, Spencer James M. Ward, Britt J. E. Hartman, Clearfield A. J. Anderson, Sioux City Dr. C. E. Golly, Spencer Rush R. Gabrielson, Sioux City Chas. R. Keyes, Mt. Vernon Prof. T. C. Stephens, Sloux City O. W. Remer, Le Mars Roy Banning, Cresco

#### 1915-16

Vern D. Evans, Marshalltown Wesley Kubichek, Iowa City Alfred M. Bailey, Iowa City Prof. T. O. Stephens, Sloux City B. H. Bailey, Oedar Rapids James Ward, Britt A. J. Anderson, Sioux City Paul Eiffert, Sloux City D. H. Luckenbill, Mediapolis Dr. C. E. Golly, Spencer H. C. Tennant, Arnold's Park W. John Graham, Buffalo O. W. Remer, Le Mars LeRoy Titus Weeks. Emmetsburg Samuel F. Foft, Waukee Charles R. Keyes, Mt. Vernon Mrs. Ira N. Gabrielson, Marshalltown Prof. Joseph Steppan, Des Moines Rev. P. B. Peabody, Independence



Rescue Work Along Mississippi River. Crew, Launch and Flatboat starting out for day's work.



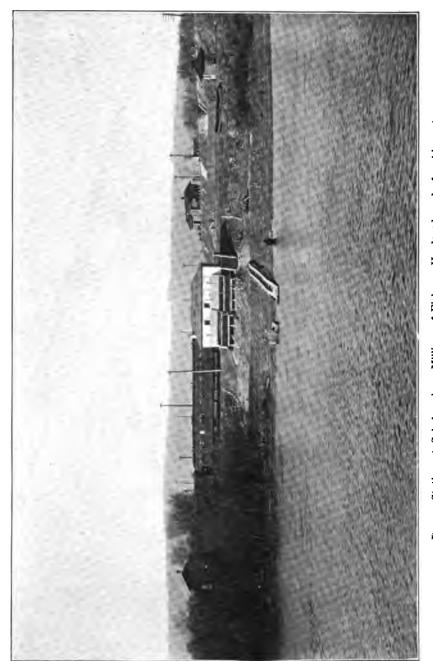
Making the Haul in Shallow Bayou in Res cue work along the Mississippi River.



Sorting the Fish. Note men standing in Bayou showing dept of the water, where fish would perish during winter months.



Method of Carrying the Rescued Fish to the Station.

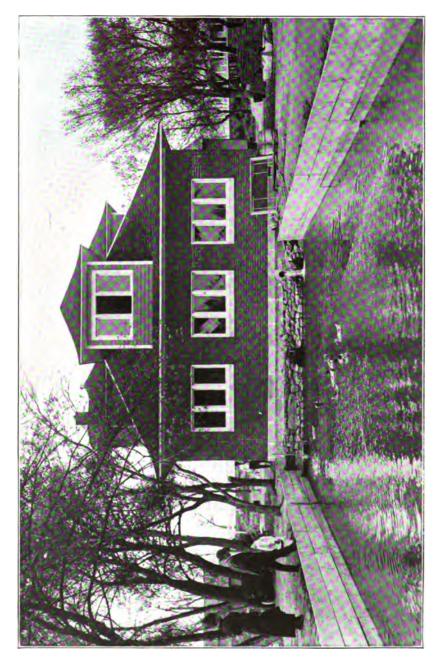


Rescue Station at Sabula where Millions of Fish are Hardened ready for shipment.





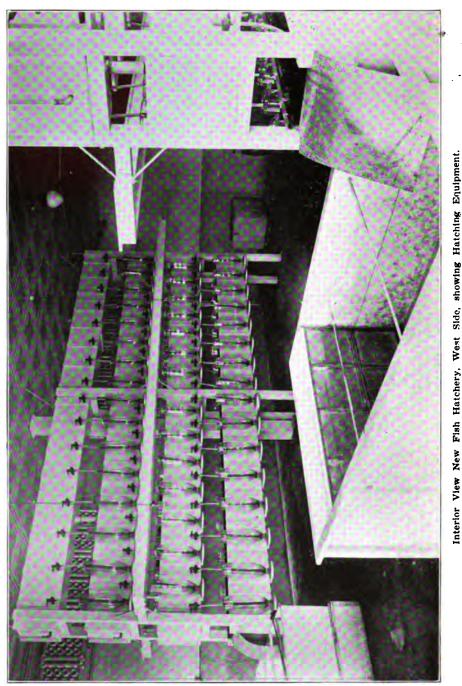
Iowa's New Fish Hatchery at Spirit Lake. Built in 1115, showing steel 30,000 gallon water tank, front view.



Iowa's New Fish Hatchery. Rear view, wild Mallards in the pond.



Interior View New Fish Hatchery, East Side, showing Hatching Equipment.



## RECEIPTS FROM HUNTING LICENSES.

Amounts received in each county of the state from Hunting Licenses during Biennial Period.

	Year,	1914-15	Year, 1915-16		
County	Resident	Non Resident	Resident	Non Resident	
	\$ 846.00		\$ 825.00		
AdamsAllamakee	876.00 741.00	\$ 50.00	276.00 720.00	\$ 60.00	
Appanoose	1,761.00		1,471.00	80.00	
Audubon	405.00		397.00		
Benton	964.00		1,102.00		
Black Hawk	2,477.00		2,589.00	10.0	
BooneBremer	1,384.00 1,216.00		1,294.00	20.0	
Buchanan	1,168.00		1,186.00 1,165.00	10.00	
Buena Vista	698.00		772.00	10.0	
Butler	889.00		825.00		
Calhoun	449.00		584.00		
Carroll	814.00	10.00	972.00	20.0	
CassCedar	794.00 625.00		914.00 687.00	10.00	
Cerro Gordo	1.668.00	30.00	1.546.00	80.0	
Cherokee	444.00	30.00	498.00	10.0	
Chickasaw	1,157.00		1,188.00	20.0	
Clarke	472.00		550.00		
Clay	606.00	20.00	686.00	40.0	
Clayton	1,995.00		1,949.00		
Clinton Crawford	1,727.00		1,510.00	10.0	
Dallas	915.00 1.858.00		929.00 1.816.00	110.0	
Davis	780.00		825.00		
Decatur	369.00	1	417.00		
Delaware	1,146.00		1,328.00		
Des Moines	1,572.00	80.00	1,283.00	70.0	
Dickinson Dubuque	904.00 2.782.00	10.00	1,089.00 2,383.00	10.0 40.0	
Emmet	838.00	20.00	740.00	20.0	
Fayette	1,448.00		1,511.00		
Floyd	1,084.00		1,003.00	20.0	
Franklin	781.00		707.00		
Fremont	567.00	50.00	678.00	80.0	
GreeneGrundy	731.00 557.00		724.00 566.00		
Guthrie	862.00		987.00		
Hamilton	900.00		789.00	10.0	
Hancock	574.00		626.00		
Hardin	1,868.00		1,395.00		
Harrison	1,015.00		1,088.00		
Henry Howard	439.00 888.00	10.00	512.00 914.00		
Humboldt	428.00		457.00	10.00	
Ida	806.00		825.00	25.0	
lowa	696.00		735.00		
Jackson	1,882.00	10.00	1,831.00	10.0	
Jasper	1,284.00		1,448.00		
Jefferson	506.00		468.00		
Johnson Jone <del>s</del>	1,668.00 847.00		1,526.00 878.00	10.00	
Keokuk	937.00		890.00	10.00	
Kossuth	986.00	10.00	922.00		
Lee	1.682.00	50.00	1,822.00		

## DECEMBER, 1914.

28 3 2 2 1	Hunting without license  Illegal fishing  Dynamiting fish (2 jail sentences 15 days each)  Killing Ringneck Pheasants  Killing Game out of season	677.50 34.95 105.00 64.20 12.15
36	Total\$	893.80
	JANUARY, 1915.	
23 4 2 2	Hunting without license Illegal fishing Killing Game out of season Killing Wild Deer	583.35 53.20 47.50 63.80
31	Total	747.85
	FEBRUARY, 1915.	
	FEDRUARI, 1910.	
5 3 7	Hunting without license\$ Illegal fishing Killing Game out of season	108.40 31.50 123.45
15		263.35
	MARCH, 1915.	
	- <b>,</b>	
4 5 4	Hunting without license\$  Illegal fishing  Dynamiting fish	105.90 161.35 462.20
13	Total\$	729.45
	APRIL, 1915.	
3	Hunting without license\$	90.35
61	Illegal fishing  (2 jail sentences 30 days each; 2 jail sentences 25 days each, and 1 jail sentence 10 days.)  Dynamiting fish	802.30
8	Dynamiting fish	285.55
67	Total\$	1,178.20
	MAY, 1915.	
86 2 1	Hunting without license Illegal fishing Killing game out of season Killing song birds Selling bird feathers for millinery purposes	85.55 452.40 19.95 6.00 49.35
45	Total\$	613.25
	JUNE, 1915.	
6 28 5	Hunting without license  Illegal fishing  Dynamiting fish  (1 iail sentence 30 days: 1 iail sentence 15 days)	138.00 438.30 261.40
1 2 1	Dynamiting fish  (1 jail sentence 30 days; 1 jail sentence 15 days.)  Robbing Wild Ducks' nests  Killing game out of season  Killing song birds	11.00 32.05 10.35
43	Total\$	891.10

## JULY, 1915.

8 29 1 1	Hunting without license Illegal fishing Dynamiting fish Killing song birds Robbing wild ducks' nests	249.20 344.75 168.35 16.50 12.85
40	Total\$	791.65
	177G77GW 1741F	
	AUGUST, 1915.	
30 2 1	Hunting without license	131.55 393.40 27.45 7.60
39	Total\$	560.00
	SEPTEMBER, 1915.	
	•	150.05
18 3 3 4 2	Hunting without license Illegal fishing Dynamiting fish Shooting ducks from boat before sunrise Killing song birds Killing game out of season	172.35 813.60 251.55 35.80 57.00 26.70
31	Total\$	857.00
	OCTODER 1015	
	OCTOBER, 1915.	
26 12 4 1 2	Hunting without license Illegal fishing Shooting ducks from boats before sunrise Killing game out of season Killing song birds Hunting on Game Reserves	745.40 272.90 47.05 16.80 19.35 4.75
46		1,106.25
	NOVEMBER, 1915.	
19		500 OF
1 1 2 23 1	Hunting without license Illegal fishing Dynamiting fish Killing game out of season Killing song birds Killing fur bearing animals out of season Selling bird feathers for millinery purposes Hunting on Game Reserve	508.95 84.85 53.85 13.20 58.15 540.55 22.50 6.00
53		1,288.05
	DECEMBER, 1915.	
2 1 7 9 44	Illegal fishing Killing song birds Killink game out of season Killing fur bearing animals out of season Hunting without license	36.65 6.00 116.00 122.80 1,179.15
64	Total\$	1,460.60
	,	_,_,,,,,
	JANUARY, 1916.	
10 4	Hunting without license (jail sentence 30 days)\$ Illegal fishing	264.55 40.30

## FISH AND GAME PROTECTION FUND.

From Hunting licenses 1914-15	FISH AND GAME PROTECTION FUND.
Disbursements   205,147.88   Balance June 30, 1916	From Scientific permits issued 1915-16
Amounts received for licenses from Woodbury and Lucas counties estimated for the year 1915-16.  INVENTORY OF PROPERTY BELONGING TO FISH AND GAME DEPARTMENT.  OFFICE.  Office furniture  Office stationery and supplies  HATCHERY.  30 acres land with original buildings and value improved to July 7, 1916  New Hatchery Building  Hatchery equipment  Hatchery equipment  Hatchery water tank  Hatchery pumps and engines  Hatchery pumps and engines  Hatchery plumbing and connections for building, building to water tank, water tank to pumps, pumps to water supply  Superintendent's cottage  Double closet, coal house, bird house and old hatchery building  Wheel scrapers  GAME FARM.  Game farm buildings, fences and equipment  RESCUE AND DISTRIBUTION.  Fish Car  Pish car barn  RESCUE AND DISTRIBUTION.  Fish car barn  RESCUE AND DISTRIBUTION.  Fish car barn  RESCUE AND DISTRIBUTION.  Fish station at Sabula with tanks and pipes  1,000.00  1,	Total amount available during blennial period         338,441.45           Disbursements         205,147.89
## DEPARTMENT.  Office furniture	Amounts received for licenses from Woodbury and Lucas counties estimat-
Office furniture	
## HATCHERY.  30 acres land with original buildings and value improved to July 7, 1916	OFFICE.
30 acres land with original buildings and value improved to July 19   1916	Office furniture
1916	HATCHERY.
Game farm buildings, fences and equipment   8.000.00	1916       \$25,000.00         New Hatchery Building       4,000.00         Hatchery equipment       1,409.65         Hatchery heating plant       512.00         Hatchery water tank       1,810.00         Hatchery pumps and engines       530.00         Hatchery plumbing and connections for building, building to tank, water tank to pumps, pumps to water supply       585.18         Superintendent's cottage       1,000.00         Double closet, coal house, bird house and old hatchery building       425.00         10 wheel scrapers       425.00         20 slips       80.00
### RESCUE AND DISTRIBUTION.    Fish Car	GAME FARM.
Fish Car       14,500.00         Fish car barn       625.00         Fish station at Sabula with tanks and pipes       1,000.00         Tools and equipment on fish car       150.00         Tools and equipment at Sabula       517.00         Seines and rescue work equipment       611.00	Breeding birds on game farm 3,408.00
I'ish car barn       625.00         Fish station at Sabula with tanks and pipes       1,000.00         Tools and equipment on fish car       150.00         Tools and equipment at Sabula       517.00         Seines and rescue work equipment       611.00	RESCUE AND DISTRIBUTION.
Launches       1,650.00         Boats       233.25         Camp outfits       77.95	Fish car barn       625.00         Fish station at Sabula with tanks and pipes       1,000.00         Tools and equipment on fish car       150.00         Tools and equipment at Sabula       517.00         Seines and rescue work equipment       611.00         Flat boats       80.00         Launches       1,650.00         Boats       233.25         Camp outfits       77.95

Total ......\$68,952.32



# DISBURSEMENTS FROM THE FISH AND GAME

FROM JULY 1, 1914.

Date	Official Ralaries	Office Expense	Printing	Deputy Salaries	Traveling Expenses	Freight and Express	Pubic water Expenditures
July, 1914 August September October November December January, 1915 February March April May June	\$ 568.33 568.33 568.33 568.33 568.33 568.33 568.33 563.33 563.33 563.33	\$ 226.89 180.95 840.23 801.11 257.87 236.04 276.81 255.62 248.58 206.09 862.71 236.00	\$ 862.45 	\$ 4,588.50 8,732.75 595.00 8,718.64 3,292.58 8,638.75 3,605.00 2,596.25 3,060.00 8,960.25 8,336.25	\$ 1,942.38 1,951.82 337.20 1,855.27 1,854.35 1,430.96 1,226.36 1,102.25 962.42 969.62 1,371.54 1,385.98	\$ 88.08 .57 21.85 23.74 10.12 1.35 7.80 25.81 22.58 18.14 17.01 12.59	\$ 2,519.15 26.00 
Total	\$6,999.96	\$3,596.40	\$1,059.52	\$ 89,229.97	\$ 15,481.14	\$ 198.09	\$2,701.20

In the year 1914-15 \$3,669.08 of deputies' salaries was spent for rescue work, \$3,684.00 for

FROM JULY 1, 1915,

		1	·	1		1	
July, 1916	\$ 583.33	\$ 191.56	\$1,128.76	\$ 8,262.50	\$ 1,495.97	\$ 12.60	
August	588.33	196.66	10.00	3,269.25	1,484.50	85.14	
September	583.33	248.16		8,781.75	2,202.52	20.12	94.50
October	588.33	196.70	64.40	8,857.75	1,782.40	99.79	150.00
November	588.33	223.62	5.85	8,901.25	1.777.09	19.79	6.55
December	588.38	237.99	16.58	8.942.50	1.749.01	5.35	3,896.31
January, 1916	588.38	194.96		8,481.25	1.684.40	5.23	750.00
February	588.38	210.38		3,351.25	1,522,18	2.05	562.50
March	568.33	276.00	81.70	8,156.26	1,422,28	143.16	
April	583.38	802.24		3,587,50	1.501.17	8.97	649.45
May	568.38	194.52		8,892,50	1.787.50	12.52	6.05
June	588.88	189.49		8,922.50	2,108.09		1,128.00
Total	\$6,999.96	\$8,237.61	\$1,257.24	\$ 48,296.25	\$ 20,417.06	\$ 859.81	\$ 7,207.52
Grand total	\$18,999.92	\$6,774.01	\$2,316.76	\$ 82,525.22	\$ 85,848.20	\$ 552.90	\$ 9,908.72

In year 1915-16 \$4,008.08 of deputies' salaries was spent for rescue work, \$3,987.48 for care \$250.90 for educational work.

# PROTECTION FUND FOR THE BIENNIAL PERIOD.

TO JUNE 80, 1915.

_	Oare of Game Birds	Game Farm .	Rescuing and Distributing Fish	Fish Hatchery	Property Bought	88 83 84	Game Birds	Cost of Hatchery	Miscellaneous	Total
*	13.11 30.80 179.20 50.30 1.38 290.70 62.82 66.49 43.50 8.50 35.80	\$ 873.60 804.77 529.57 190.90 218.15 388.41 385.90 149.89 465.01 1,141.72 719.86	\$ .91 5.00 42.52 750.90 1,739.73 544.00 250.62 181.80 	\$ 68.00 - 4.50 58.22 78.75 6.75 4.96 30.60 119.25 185.85 143.27 116.50	\$ 84.83 191.97 4.50 30.60 48.14 45.49 107.88 13.50 831.90 18.40 106.90	\$ 1,082.00		\$ 8,596.47	\$ 98.71 87.44 114.69 6.83 4.84 18.60 2.26 27.98 17.78 43.44 39.10 7.47	\$ 11,418.94 7,007.14 2,192.52 7,524.51 7,784.99 7,082.12 6,691.73 5,922.46 4,799.20 5,850.68 17,497.05 7,689.84
*	786.10	\$4,813.68	\$3,911.50	\$ 817.70	\$ 983.61	\$ 1,802.00	\$ 995,11	\$ 8,586.47	\$418.59	\$ 91,445.13

care of game birds.

TO JUNE 80, 1916.

8	15.85	\$ 67	0.69	8	70.	00	\$	142.	95	8	240	.20	8	7	3.06								8 3	1.80	8	7.8	07.44
٠	16.71	93	1.84		343.	04		14.	06	ľ	186	.86	I						l				1	8.64	ľ	7.0	185.S
	46.23	74	8.19	1,	,274.	19		68.	10	1	,148	.50	l			3	50	.00	\$	1,1	51.0	n I		2.04	L	11,8	56.6
•	49.64	47	B. <b>66</b>	1	,904.	<b>30</b>		13.	55	l	479	.58	l				44	.00		(	180.7	74	8	4.35	1	10,6	109.19
		36	6.06	2	,000.	75				ı	80	. 18	l				231	.82	i	3,2	250.7	79		1.04	1	12,4	68.10
	39.98	26	1.60	l	289.	08		100.	.00	ı	42	.90	l							1,5	97.9	23		.50	1	12,4	<b>61.3</b> 3
	30.23	28	7.84	1	884.	81		100.	.00	l	180	.79	l			l				1	41.0	06		8.24	1	8,8	71.3
	9.70	10	5.20	!	8.	90		100.	.00	l			l				7	.50		٤	N2.8	<b>30</b>		1.50	ı	7,4	02.20
	35.66	20	1.65	1	9.	09		118.	26	1	121	.05	l			l				2,7	Б4.I	57		2.28	١.	8,8	565.22
	9.05	41	4.95		22.	00		172.	30	Į	196	.60				ļ					22.4			1.60	1		XX 800
	24.00	40	8.84	1	1.:	20		640.	.02	ľ	60	.30				l					771.5			.25	1		MQ.96
	22.60	47	8.40	l	1.	00		488.	12		170	.71							l	8	378.0	00			·	9,7	706.20
\$	299.15	\$5,45	1.92	\$6	,858.	44	\$1,	967.	85	\$2	,925	.62	\$	73	.05	\$	833	.32	\$ 1	2,6	305.	57	<b>\$</b> 9	1.74	\$	113,7	62.70
\$1	,085.25	\$10,2	95,60	\$1	0,265.	.03	<b>\$2</b>	775.	.05	\$3	,909	.23	\$1	105	.05	\$1	,328	.43	\$ 2	1,1	142.0	04	\$51	0.88	8	205,1	47.8

of game birds. In the year 1915-16 expenditure was also \$585.25 for printing law books and

## BOUNDARY WATER LICENSES ISSUED

## FROM JULY 1, 1914, to JULY 1, 1915.

Powell Hledick, Council Bluffs, \$5.10; Albert Bimers, Council Bluffs, \$5.10; Joe Blozek, Council Bluffs, \$5.10; Christ Behr, Almont, \$5.10; C. R. Sutton, Ft. Madison, \$6.00; Otto Wiland, Le Claire, \$6.00; Thos. Aten, Davenport, \$5.10; Henry Moyer, New Boston, Ill., \$6.00; Henry Whipko, Davenport, \$4.80; Chas. Jens, Davenport, \$2.40; B. Harrison, Council Bluffs, \$1.80; Rudolph Beal, River Sioux, \$6.00; A. Siegel, Dubuque, \$1.20; Harry Zipp, Burlington, \$3.00; Frank Nesselbush, Muscatine, \$5.10; Walter Miller, Dubuque, 60 cts.; S. P. Bliss, Dubuque, \$5.10; Rudolph Tharp, Dubuque, \$1.20; C. E. Anderson, West Burlington, \$5.10; Chas. Deitz, Burlington, \$1.20; Frank King, Burlington, \$6.00; W. E. Moyer, New Boston, Ill., \$6.00; Milo Aitken, Bartlett, 60 cts.; C. J. Bischoff, Burlington, \$1.20; John Stephens, Burlington, \$18.00; Willie Smith, Council Bluffs, \$5.10; Frank Kochar, Council Bluffs, \$5.10; C. Kieser, Council Bluffs, \$3.60; H. A. Schurtzman, North Mc-Gregor, \$7.20; E. Flieder, Sioux City, \$5.10; Tim Salladay, Ft. Madison, \$2.40; Aaron Salladay, Ft. Madison, \$1.80; Martin F. Schmidt, Davenport, 60 cts.; L. H. Stineman, Spechts Ferry, \$6.00; Wm. O. Peterson, Fort Madison, 60 cts.: Wm. Stanton, Keokuk, \$2.40; B. Harrison, Council Bluffs, \$5.10; A. E. Haroley, Sioux City, \$1.80; Harris Valley, Davenport, \$1.20; John P. Cope, Camanche, \$1.10; Jack Fletcher, Davenport, 60 cts.; John Berwonger, Dubuque, \$10.10; Fred Smith, Princeton, \$9.00; Herman Harturg, Davenport, \$5.10; C. W. Holliday, Muscatine, \$3.00; Christ Kieser, Council Bluffs, \$5.10; A. C. Anderson, Dubuque, \$5.10; C. W. Anderson, Burlington, \$1.20; W. O. Peterson, Ft. Madison, \$1.20; Cliff Smith, Council Bluffs, \$1.20; J. S. Stumpf, Council Bluffs, \$8.10; Henry Hehnke, Davenport, \$2.20; Geo. Mizer, Montrose, \$1.10; Mark Nelson, Keokuk, \$1.80; F. E. Anderson, Fort Madison, 60 cts.; Frank Jordan, Camanche, \$3.00; John O. Marah, Davenport. \$2.20; Luther Howard, Camanche, \$4.80; Wm. Pelow, Sioux City, \$1.20; Lee Suiter, Le Claire, \$4.80; Chas. McMahon, Lyons, \$5.10; Wm. A. Gruner, Council Bluffs, \$5.10; Henry Saengling, Guttenburg, \$27.50; F. Jacobs, Clayton, \$5.10; L. Butem, Clayton, \$5.10; Clyde Hugemin, Camanche, \$14.90; M. B. Westgate, Camanche, \$10.10; Jake Wick, North Buena Vista, \$1.80; E. A. Hall, Dubuque, 60 cts.; J. L. Kelley, Dubuque, 60 cts.; Louis Duesing, Dubuque, \$5.10; J. C. Carpenter, Dubuque, \$1.20; Herman Gottloeber, Bellevue, \$5.10; John Putman, Bellevue, \$6.00; Jesse McCleary, Waupeton, \$3.60; R. L. MacFarlane, Mondamin, \$1.20; Wm. S. Smith, Council Bluffs, \$1.20; Frank Toote, Council Bluffs, \$3.60; W. M. Hall, Council Bluffs, \$4.80; Ed. Williams, Bartlett, \$5.10; George Putman, Bellevue, \$2.40; A. Ehrhardt, Bellevue, \$5.10; Frank Klonus, Garfield, \$10.10; E. Zapf, Dubuque, 60 cts.; John Klein, Bellevue, \$1.80; J. W. Holliday, Spechts Ferry, \$5.10; Peter Trideman, Sioux City, 60 cts.; William Dehning, Davenport, \$3.60; A. A. Cook, Sioux City, 60 cts.; Hersh Gordon, Camanche, \$4.80; Thomas Hugiun, Camanche, \$3.00; W. A. Meis, Council Bluffs, \$1.20; Jock Olset, Sargents Bluffs, \$1.20; Mike Ovinger, Sioux City, \$5.10; John Stumpf, Council Bluffs, \$10.10; W. T. Davis, Montrose, \$1.10; Jessie Flory, Burlington, \$12.00; John Clementsen, Council Bluffs, \$10.10; C. B. Mead, Keithsburg, \$5.10; Chas. B. Kyle, Keithsburg, \$4.80; John Barnette, Keithsburg, \$5.10; Geo. H. Nutt, Weaver, \$5.10; Horace Sander, Clinton, \$5.10; James Jones, Clinton, \$5.10; James McCabe, Burlington, 60 cts.; David Shiverly, West Burlington, \$1.20; C. E. Lave, Montpieler, \$5.10; C. A. Ross, North McGregor, \$2.40; Sam Peterson, Davenport, \$10.10; O. C. Phillips, Muscatine, \$5.10; Ira Pierce, North Buena

Vista, \$5.10; Allison Garard, Muscatine, \$5.10; James Carbine, Muscatine, \$5.10; Julius Barber, Muscatine, \$5.10; Frank Nolte, Davenport, \$5.10; Clyde Cloud, Montrose, \$2.20; S. P. Smith, Keokuk, \$5.10; Kelse Gibbs, Spechts Ferry, \$5.10; A. Avery, Dubuque, \$5.10; Wm. Wachendorf, North Buena Vista, \$5.10; Jake Wick, Buena Vista, \$5.10; Thomas Berry, Dubuque, \$10.10; M. D. Kaiser, Bellevue, \$6.00; Joe McAdams, Keokuk; \$3.60; Henry Dehning, Davenport, \$1.20; Ben Reickendocher, Davenport, 60 cts.; Henry S. Suhl, Buffalo, 60 cts.; Herman Harting, Davenport, \$3.00; F. E. Rathburn, Princeton, \$10.10; Geo. Suman, Bettendorf, 60 cts.; H. J. Beach, Muscatine, \$5.10; Wm. Millinerger, Montrose, \$5.10; Wm. Uptaje, Montrose, \$4.40; Claud Deckey, Dallas City, Ill., \$5.10; A. J. Larson, Onawa, \$5.10; Ed. Hoenig, Montrose, \$5.10; Geo. W. Noble, Princeton, \$5.10; Rudolph Pappenenroth, Buffalo, \$5.10; Joe Vilsimeir, Davenport, \$3.60; F. H. Retman, Princeton, \$6.00; F. H. Putman, Princeton, \$2.20; Carl Adam, Davenport, 60 cts.; Cuda Noyes, Mondamin, \$5.10; D. M. Creigton, Mediapolis, \$6.30; Robert Engelbind, Ft. Madison, \$1.20; Ben H. Lyons, Dallas City, Ill., \$14.00; Chas. Shain, Dallas City, Ill., \$30.00; Tim Salladay, Ft. Madison, \$5.10; Matthon Gasaway, Dallas City, Ill., \$30.00; John Grupe, Burlington, \$5.10; John Emig, Camanche, \$15.20; Roy White, Camanche, \$5.10; M. L. Lewis, Mondamin, \$5.10; J. Schmitker, Ft. Madison, \$5.10; H. Rippenkroeger, Ft. Madison, 60 cts.; W. M. Anson, Camanche, \$5.10; H. Mensinger, Camanche, \$5.10; H. Von Kamfer, Bettendorf, \$5.10; James Cloud, Montrose, \$1.10; Clyde Cloud, Montrose, \$2.20; Claud Dickey, Dallas City, Ill., \$30.00; R. E. Canfield, Bettendorf, \$5.10; Stanley Terry, Bettendorf, \$5.10; Chas. Hugunin, Camanche, \$25.40; Wm. Platt, Camanche, \$5.10; L. W. Howard, Camanche, \$5.10; Ed. Green, Fort Madison, \$4.20; Aaron Salladay, Fort Madison, \$12.00; Huburt Chouma, Fort Madison, 60 cts.; W. E. Hoskins, Fort Madison, \$6.00; S. Anderson, Council Bluffs, \$10.10; E. J. Noonan, Fort Madison, \$8.10; Geo. Mizer, Montrose, \$4.40; Walter Clark, Bettendorf, 60 cts.; C. Roberson, Bettendorf, \$1.20; Sam Peterson, Davenport, \$12.50; Thos. Hugumin, Camanche, \$5.10; Andrew Townsend, Bettendorf, \$5.10; C. E. Rook, Princeton, \$5.10; M. B. Westgate, Camanche, \$10.20; D. A. Moore, Bartlett, \$5.70; Otto Wiland, Pleasant Valley, \$5.10; Math Hay, Pleasant Valley, \$11.10; Edward Moeller, Pleasant Valley, \$5.10; J. E. Romick, Pleasant Valley, \$5.10; W. H. Abney, Davenport, \$5.10; Chas. Young, Ft. Madison, \$5.40; Tim Salladay, Senecan, \$1.80; John Stockwell, Montrose, \$1.10; Geo. Hoskins, Ft. Madison, \$5.10; Ed. Hoeing, Montrose, \$5.10; H. G. Chestnut, Wever, \$5.10; John Starkey, Dallas City, Ill., \$13.20; Jos. Vilsmeier, Daevnport, \$2.20; A. H. Lee, Princeton, \$5.10; Wm. Kammerer, Ft. Madison, \$10.50; Clarence Sutton, Ft. Madison, \$5.10; Anton Kochar, Council Bluffs, \$5.10; Frank Kochar, Council Bluffs, \$5.10; Frank Holliday, Davenport, \$5.10; Thomas Aten, Davenport, \$16.10; Summer Heckerman, Davenport, \$5.10; A. Casperson, North McGregor, \$20.20; John Fletcher, Davenport, \$5.10; J. P. Gage, Sabula, \$1.20; Dell Hann, Keokuk, \$9.00; C. G. Johnson, McPaul, \$5.10; Fred Buhr, McPaul, \$5.10; A. A. Keim, Davenport, \$1.80; A. J. Larson, Onawa, \$5.10; August Behr, Almont, 60 cts.; Tim Salladay, Ft. Madison, \$2.40; Geo. Farelaufer, Montrose, \$1.20; Wm. Upton, Montrose, \$3.90; L. F. Mohler, Ft. Madison, \$1.10; R. Hardin, Montrose, \$2.20; W. B. Sprouse, Montrose, \$5.10; H. L. Steglenhorst, Clinton, \$5.10; R. McColley, River Sioux, \$5.10; J. R. Kaneok, Burlington, 60 cts.; Wm. Mitchell, Dallas City, Ill., \$12.00; Ed. Dohlsten, Burlington, \$3.60; Geo. Heck, Burlington, \$1.20; H. M. Miller, Dallas City, Ill., \$5.10; L. Miller, Dallas City, Ill., \$5.10; Geo. Nutt, Weaver, \$5.10; T. D. Bone, Davenport, \$5.10; Wm. Gracser, Davenport, \$1.10; F. Zernechel, Davenport, \$3.30; Christian Behr, Almont, \$2.90; Chas. Feiner, Clinton, \$5.10; L. Gueier, Clinton, \$5.70; A. Hemphey, Sabula, \$2.40; J. P. Busch, Sabula, 60 cts.; Nels Dahl, Whiting, \$5.10; J. W. Platte, Dallas City, Ill., \$54.00; J. G. Weber, Nauvoo, Ill., \$4.40; Wm. Kachle, Nauvoo, Ill., \$6.60; C. E. Dunsworth, Dallas City, Ill., \$12.00; Wm. Reynolds, Ft. Madison, \$5.10; J. F. Burcham, Mondamin, \$5.10; Frank Curry, Muscatine, \$5.10; Asa A. Dolsen, Muscatine, \$5.10; C. Marsh, Muscatine, \$5.10; E. L. Brown, Bartlett, \$6.30; Joe Schmidt, Ft. Madison, \$5.10;

M. Richardson, Pacific Junction, \$10.10; A. Avery, Dubuque, \$10.20; Loyd Kelley, Dubuque, \$5.10; Julius Wiedner, Dubuque, \$8.70; H. J. Kack, Dubuque, \$10.10; Fred Clow, Dubuque, \$5.10; Frank Klonus, Dubuque, \$5.10; Walter Carson, Dubuque, \$5.10; A. C. Anderson, Dubuque, \$5.10; J. Chaloupke, Dubuque, \$1.20; R. Thorp, Dubuque, 60 cts.; John Studon, Dubuque, \$1.20; Geo. Kueper, Dubuque, 60 cts.; H. Clow, Dubuque, 60 cts.; Joe Gonifier, Lansing, \$22.00; Milton Penrod, Ft. Madison, \$3.60; Joe McAdams, Keokuk, \$2.40; Sam Canida, Keokuk, \$1.20; Wm. Machalek, Bettendorf, \$1.20; Owel Rowland, Onawa, \$5.10; Andy Gantenbein, New Albin, \$22.70; U. Gantenbein, New Albin, \$33.90; Wm. Smith, Sergeants Bluffs, \$2.40; Chas. Smith, Lansing, \$5.10; G. W. Teel, Ft. Madison, \$5.10; W. H. Upton, Montrose, \$2.40; Chas. Tieken, Ft. Madison, \$5.10; H. Shaw, Princeton, \$5.10; D. W. Ney, Princeton, \$5.10; H. Jahn, Princeton, \$5.10; A. C. Hoffman, Davenport, \$6.30; H. Valley, Davenport, \$5.10; H. Beiners, Davenport, \$1.20; C. Schricker, Davenport, \$10.10; W. S. McCrellian, Bettendorf, 60 cts.; J. W. Thie, Mediapolis, \$5.10; T. Allen, LeClaire, \$12.00; Lee Suiter, LeClaire, \$5.10; C. Graap, LeClaire, \$12.00; O. McPartland, Burlington, \$9.90; F. Craft, Burlington, \$10.10; W. M. Morgan, Keithsburg, \$10.10; J. D. Priece, Burlington, \$4.80; R. Chesnut, Burlington, \$5.10; H. Gibbs, Keithsburg, \$9.00; E. Samuelson, Burlington. \$5.10; J. Stockwell, Montrose, \$1.10; J. Micer, Ft. Madison, \$2.20; J. Wick, North Buena Vista, \$5.10; C. Staut, Spechts Ferry, \$5.10; B. Minnert, Dubuque, \$10.10; D. W. Townsend, Dubuque, \$5.10; T. Berry, Dubuque, \$5.10; R. Dodge, North Buena Vista, \$5.10; C. Smith, North Buena Vista, \$2.40; J. B. Beavers, North Buena Vista, \$11.10; J. R. Swingle, Bettendorf, 60 cts.; J. W. Luth, Lansing, \$10.20; L. Boardman, Lansing, \$15.30; J. H. Stender, Davenport, \$3.60; T. Funkhousen, Whiting, \$5.10; M. Martins, Rockingham, \$9.90; D. Shaw, Princeton, \$5.10; C. Noble, Princeton, \$5.10; J. Betzl, Betrendorf, \$1.20; J. Wiedner, Harpers Ferry, \$44.00; J. Cerny, Davenport, 60 cts.; J. E. Wiedner, Dubuque, \$5.10; E. J. Wiedner, Dubuque, \$5.10; Faust & McColly, Bellevue, \$10.10; J. Klien, Bellevue, \$5.10; C. Putman, Bellevue, \$5.10; G. Putman, Bellevue, \$5.10; J. Putman, Bellevue, \$5.10; J. Gape, Waupeton, \$5.10; E. Swindell, Waupeton, \$5.10; A. Zapf, Dubuque, 60 cts.; M. Bruesch, Dubuque, 60 cts.; G. Waldorf, Dubuque, 60 cts.; Wm. Becker, Dubuque, 60 cts.; F. Grutz, Dubuque, 60 cts; A. Zapf, Dubuque, 60 cts.; J. Garrow, Sabula, \$36.30; John Kimpel, Sabula, \$1.80; J. P. Busch, Sabula, 60 cts.; Tom Breen, Ft. Madison, \$5.10; Wm. Fisher, Ft. Madison, \$1.20; L. T. Mohler, Ft. Madison, \$3.00; E. E. Roberts, Nauvoo, Ill., \$1.00; F. E. Andrews, Ft. Madison, 60 cts.; P. Kledick, Council Bluffs, \$5.10; C. L. Ruffman, Mondamin, \$5.10; W. S. Smith, Council Bluffs \$7.50; J. F. Walker, Council Bluffs. \$2.40; S. Anderson, Council Bluffs, 60 cts.; J. B. Currier, Sabula, \$23.10; J. Hurderand, Sabula, \$1.20; Chris Swanson, Davenport, 60 cts.; H. A. Schurtzman, North McGregor, \$9.00; Dan Harris, Fruitland, \$5.10; C. L. Trout, Muscatine, \$5.10; J. E. Snyder, Fairport, \$5.10; L. R. Currier, Sabula, \$5.10; H. Havill, Bellevue, \$5.10; Ben Bohr, Dubuque, \$5.10; Geo. Clark, Dubuque, \$6.30; F. B. Krieght, Harpers Ferry, \$10.10; Frank King, Dubuque, 60 cts.; Wm. Pust, Dubuque, \$5.50; K. Gibbs, Spechts Ferry, \$4.80; Niles Bro., Bellevue, \$12.00; J. Blozek, Council Bluffs, \$5.10; J. Delisle, Council Bluffs, \$5.10; G. Gibbs, Muscatine, \$3.00; A. McMiller, Muscatine, \$6.00; S. M. Kile, Muscatine, \$9.90; Sam Gilbert, Muscatine, \$6.30; Ben Hess, Muscatine, \$5.10; O. Engston, West Burlington, \$5.10; I. Huss, Oquawka, Ill., \$5.10; W. Thirenes, Burlington, \$5.10; G. C. Clark, New Boston, Ill., \$37.20; R. T. Smith, Weaver, \$6.00; J. Hartman, Keithsburg, \$18.00; Wm. Linden, Burlington, \$1.20; A. Yoger, Burlington, \$1.20; J. T. Hutmacher, Nauvoo, \$2.40; H. Argast, Nauvoo, Ill., \$3.00; F. Newton, Nauvoo, Ill., \$1.10; B. E. Jemison, Nauvoo, Ill., \$2.20; O. C. Olsen, Clinton, \$5.10; L. Short, Camanche, \$5.10; G. Norlin, Clinton, \$1.20; J. Zortman, Onawa, \$5.10; D. G. Boardman, Harpers Ferry, \$76.20; C. M. Huff, Council Bluffs, \$5.10; E. W. Peintett, Council Bluffs \$5.10; H. Dehing, Davenport, \$2.40; C. Ziebarth, Davenport, \$1.20; F. H. Putman, Princeton, \$14.10; J. Johnson, Davenport, \$4.50; C. Keemp, Bettendorf, 60 cts.; M. F. Hampton, Muscatine, \$11.10; G. Brown,

Fruitland, \$5.10; Stineman Bros., New Boston, Ill., \$6.00; W. G. Hammond, Sioux City, \$1.80; R. Thompson, Davenport, \$10.70; C. E. A. Karlson, Blenco, \$2.40; Chas. Hugunin, Camanche, \$2.40; F. Hackett, Clinton, \$1.20; C. E. Point, Clinton, \$5.10; C. Doney, Clinton, \$5.10; E. A. Thompson, Clinton, \$5.10; F. Gardan, Clinton, \$5.10; D. Breitensten, Keokuk, 60 cts.; C. L. Hess, Keokuk, 60 cts.; Starky & Scott, Warsaw, Ill., \$9.60; L. McAdams, Keokuk, \$5.10; T. Salladay, Ft. Madison, \$1.20; G. Shenpolk, Council Bluffs, \$6.00; W. H. Vencent, Council Bluffs, \$5.10; Faust & McColly, Bellevue, \$3.00; S. Greenwood, Cosville, Wis., \$21.20; Ed. Saylor, North Buena Vista, \$10.80; W. F. Wachendord, North Buena Vista, \$5.10; Wm. Post, Dubuque, \$10.10; J. Thiltgen, Spechts Ferry, \$1.20; J. Schetzer, Dubuque, \$5.10; C. C. Lutes, Bellevue, \$5.10; F. Fels, Dubuque, 60 cts.; J. C. Carpenter, Dubuque, \$2.40; F. Duesing, Dubuque, \$5.10; H. Haugh, Council Bluffs, \$1.20; J. Butler, Sioux City, \$5.10; G. C. Schrader, Clinton, \$5.10; A. E. Lowell, Clinton, \$5.10; S. Wires, Clinton, \$5.10; E. Gosan, Clinton, \$5.10; B. O. Yopst, Clinton, \$5.10; Geo. Conley, Clinton, \$5.10; E. Englehaupt, Clinton, \$5.10; J. Smith, Oquawka, Ill., \$5.10; F. Furnold, Oquawka, Ill., \$5.10; F. Cisna, Burlington, \$9.00; Smith Bros., Keokuk, \$5.10; H. Jobe, Keokuk, \$5.10; A. S. Nichols, Keokuk, 60 cts.; H. Hartwig, Davenport, \$5.40; B. Ritter, Modale, \$10.10; L. Daub, Council Bluffs, \$5.10; W. S. Smith, Council Bluffs, \$1.20; J. Harris, Muscatine, \$5.10; W. Eger, Muscatine, \$5.10; F. Almandinger, Fruitland, \$5.10; C. Lane, Montpeiler, \$5.10; 7. Hallenberger, Muscatine, \$3.60; S. L. Hale, Lyon, \$3.60; G. Woodruff, Lyon, \$3.00; S. Brooks, Lyon, \$3.00; H. Breitenstein, Keokuk, 60 cts.; O. Kackson, Keokuk, \$5.10; W. M. Parrish, Fruitland, \$5.10; A. J. Wheller, Wapello, \$5.10; J. D. McCleary, Muscatine, \$5.10; J. Carbin, Muscatine, \$5.10; W. A. Teufel, Blue Grass, \$5.70; J. Bramar, Buffalo, \$5.10; F. Worth, Waukon Junction, \$10.10; F. Matterson, Harpers Ferry, \$10.10; C. McDonnall, Council Bluffs, \$5.10; S. Jgnation, Council Bluffs, \$5.10; P. Palapa, Council Bluffs, \$5.10; C. Hamond, Keokuk, \$5.10; W. Wuehring, Guttenburg, \$10.10; F. Muller, Guttenburg, \$10.10; H. Moser, Oster Dock, \$5.10; D. Collins, Guttenburg, \$5.10; P. Daniels, Sioux City, \$8.10; T. Mohr, Hampton, Ill., \$5.10; B. Harris, Council Bluffs, \$5.10; C. Stewart, Keithsburg, \$5.10; H. Fuesst, Oquawka, Ill., \$6.00; J. Hartman, Burlington, \$6.00; J. W. Miller, Burlington, \$6.00; J. Grupe, Burlington, \$1.80; G. Rader, Lamont, Ill., \$2.40; Jolly & Son, Lamont, Ill., \$2.40; H. Hessler, Muscatine, \$5.10; M. D. Cooper, Muscatine, \$5.10; J. H. Kallemberger, Muscatine, \$5.10; H. E. Bowan, Muscatine, 60 cts; J. E. Garttett, Muscatine, \$1.20; J. Rock, Davenport, 60 cts.; J. Thuman, Ft. Madison, 60 cts.; S. Upton, Ft. Madison, \$1.20; E. R. Patterson, Ft. Madison, 60 cts.; T. Wick, Dubuque, 60 cts.; A. Bertgen, Dubuque, 60 cts.; Z. Hartman, Sabula, \$4.80; J. Berry, Sabula, \$1.20; J. C. Schmidt, Bellevue, \$9.00; H. Hayes, Bellevue, \$5.10; O. Howel, Spechts Ferry, \$5.10; J. D. Dresdan, North Buena Vista, \$5.10; E. A. McDowell. Dubuque, \$5.10; H. Dix, North Buena Vista, 60 cts.; A. Berriner, Council Bluffs, \$5.10; Geo. Sargode, Davenport, \$3.00; A. Johnson, Bettendorf, 60 cts.; W. Clark, Bettendorf, 60 cts.; C. Graap, LeClaire, \$5.10; W. Platt, Camanche, \$5.10; F. Cross, Clinton, \$5.10; H. Berg, Camanche, \$5.10; D. E. Smith, Lyons, \$5.10; Jess Mudica, Lansing, \$5,10; M. Lovinger, Sioux City, \$6.30; Geo. Sieman, Bettendorf, 60 cts.; A. J. Stillman, Waukon Junction, \$5.10; A. Leibendgert, Keckuk, \$5.10; F. H. Glancy, Montrose, \$6.00; F. J. Ketlera, Keokuk, 60 cts.; A. Whorton, Montrose, \$1.10; A. Huggins, Clinton, \$5.10; A. Wright, Council Bluffs, \$10.10; P. A. Reombrecht, Davenport, \$10.10; C. A. Cook, Crescent, \$6.00; C. Yager, Missouri Valley, \$10.70; J. J. Brown, Muscatine, 60 cts.; G. E. Smith, Mt. Peiliar, \$5.10; W. T. Kromar, Muscatine, \$10.10; F. C. Wedekind, Muscatine, \$8.70; Geo. House; Daven. port, 60 cts.; J. Frantzan, Dubuque, 60 cts.; Ed. Cook, Spechts Ferry, \$5.10; C. Heatrick, Dubuque, \$5.70; J. Roberts, Dubuque, \$5.10; Wm. Linder, Burlington, \$5.10; G. D. Robbins, Burlington, 60 cts.; J. Salleen, Burlington, 60 cts.; D. G. Emerson, Burlington, \$6.00; Z. Henry, Burlington, \$6.00; J. Stephens, Burlington, \$6.00; W. Lafferty, Oquawka, Ill., \$5.40; W. J. Davis, Montrose, \$1.10; A. Catstensen, Clinton, 60 cts.; V. Schultz, Sabula, \$6.00; F. E. Stewart, Clinton, 60 cts.; J. E. Veatch, Onawa, \$1.80; G. W. Pruiett, Council Bluffs, \$6.00; T. Dopta, Council Bluffs, \$5.10; E. Border, Davenport, \$1.20; E. Peterson, Rockingham, \$3.60; A. E. Manskee, Rockingham, \$1.80; J. Vilsmeler, Davenport, \$3.00; J. Polchow, Davenport, 60 cts.; F. Fisher, Davenport, \$11.30; G. Veda, Davenport, \$10.10; C. Christiansen, Sioux City, \$7.50; C. Rienes, Sioux City, \$1.20; A. Yost, Bartlett, \$5.70; A. Thompson, Ft. Madison, \$5.10; F. Hackett, Clinton, \$5.10; J. Dondols, Clinton, \$5.10; S. Jacobs, Lyons, \$3.00; W. Harris, Ft. Madison, \$17.10; total for 1915, \$3,043.

### FROM JULY 1, 1915, TO JULY 1, 1916.

S. Beel, Muscatine, \$4.80; H. Pitchforth, Muscatine, 60 cts.; C. Soles, Clayton, \$10.10; J. E. Buell, Guttenburg, \$5.10; A. Dietrick, Guttenburg, \$17.40; A. Becker, Dubuque, 60 cts.; A. Swift, Sabula, \$5.10; J. Berwanger. Dubuque, \$10.10; E. A. McDowell, Dubuque, \$10.10; Wm. Roberts, Sloux City, \$5.10; J. Straight, Modale, \$5.10; L. Chambers, Bartlett, 60 cts.; R. T. Lee, Princeton, \$10.10; H. Seugling, Guttenburg, \$27.50; F. Hoerr, Ft. Madison, \$5.10; J. Woods, Council Bluffs, \$5.10; J. C. Cminsten, Council Bluffs, \$5.10; M. Pruiett, Council Bluffs, \$4.80; Wm. Pieper, Davenport, \$1.20; F. Brueson, New Boston, Ill.; \$30.00; J. Stuepf, Council Bluffs, \$10.10; C. E. Sampson, River Sloux, \$6.90; Wm. Hall, Council Bluffs, \$6.90; O. Weiland, Pleasant Valley, \$4.20; G. E. Hilsinger, Sabula, \$2.40; J. E. Densmore. Sabula, \$1.80; F. Brawn, Bellevue, \$5.70; J. Doyle, Dubuque, \$5.10; Wm. Mentz, Dubuque, \$10.10; John Hein, Dubuque, 60 cts.; W. J. Boxleiter, Dubuque, 60 cts.; H. Beher, Camanche, \$3.00; C. Behr, Almont, \$5.10; A. L. Pull, Burlington, 60 cts.; E. M. Albright, Burlington, 60 cts.; N. Maygren, Burlington, 60 cts.; J. Gibbs, Burlington, \$5.40; J. Cummes, Burlington, 60 cts.; J. Hartman, Burlington, \$6.00; Ed. Bremer, Burlington, \$5.10; F. Karl, Nauvoo, Ill.; \$3.30; J. D. Nelson, Ft. Madison, \$9.90; T. M. Hadlock, Ft. Madison, \$6.00; G. A. Randell, Davenport, \$5.10; R. Papemoth, Buffalo, \$5.10; F. Kipp, Davenport, 60 cts.; LeRoy Gerdts, Davenport, 60 cts.; E. Goetsch, Bettendorf, 60 cts.; J. Poetel, Davenport, 60 cts.; Wm. Campbell, Sioux City, \$1.20; A. E. Hawley, Sioux City, \$2.40; J. Morris, Sioux City, \$5.10; C. M. Lewis, Loveland, \$10.10; A. B. Jokland, Onawa, 60 cts.; C. Adams, Davenport, 60 cts.; John Stowell, Davenport, 60 cts.; Max Schmidt, Davenport, 60 cts.; A. F. Fasse, Waukon, 60 cts.; J. Larenz, Davenport, \$3.00; G. Gertz, Davenport, \$1.20; H. Valley, Davenport, \$3.00; H. Juergens, Davenport, \$2.40; C. M. Holliday, Muscatine, \$2.40; N. B. Lewis, Council Bluffs, \$5.10; W. R. Tyler, Camanche, 60 cts.; J. Harris, Davenport, 60 cts.; W. Edmondson, Bartlett, 60 cts.; C. M. Otis, Tabor, \$5.70; W. Brookluser, Burlington, 60 cts.; R. White, Camanche, \$2.40 H.; I. Stegtenhorst, Clinton, \$1.20; D. Short, Camanche, \$3.00; A. Dimes, Lyons, \$5.10; J. I. Duley, Clinton, \$5.10; H. Offermann, Sioux City, 60 cts.; W. Pelow, Sioux City, \$1.20; E. Bieri, Sioux City, \$5.10; E. L. Copple, Sloan, \$5.10; John Edelman, Hamilton, \$11.10; C. Schreiber, Hampton, Ill.; \$3.60; H. Whipple, Davenport, \$4.80; F. J. Ketterer, Keokuk, 60 cts.; D. Perrine, North McGregor, \$10.10; G. J. Hedrick, Dubuque, \$5.10; F. Pregler, Dubuque, 60 cts.; F. Kannorath, Dubuque, 60 cts.; W. Dehning, Davenport, \$3.60; J. L. Ganson, LeClaire, \$1.20; M. B. Westgate, Camanche, \$10.10; H. Spring, LeClaire, \$5.10; T. Aton, Davenport, \$5.10; R. Wilson, Davenport, \$5.10; B. Williams, Davenport, \$1.20; T. Whiple, Davenport, \$1.20; L. C. Kantz, Muscatine, 60 cts.; W. Whitmore, Muscatine, \$10.10; C. Schreiber & O. Anderson, Hampton, Ill., \$3.60; J. J. Vogel, Hampton, Ill., \$5.10; H. Dehning, Davenport, \$1.20; E. Boldwin, Mt. Rose, \$1.20; A. Bedfred, Council Bluffs, \$3.60; W. Harris, Ft. Madison, \$30.00; F. Holliday, Davenport, \$3.00; J. F. McCleary, Davenport, \$3.00; J. D. Stanton, Keokuk, \$1.80; D. Hardwig, Blair, Neb., \$6.00; E. T. Weldon, Mondamin, \$5.10; Jake Wick, North Buena Vista, \$10.10; T. F. Mesgher, Dallas City, Ill., \$20.10; Edgar Wagner, Ft. Madison, \$30.00; Lome Short, Camanche, \$10.10; Jessie Flory, Burlington, \$6.00; John Grupe, Burlington, \$1.20; Fred Harris, Ft. Madison, \$11.00; H. Lemme, Ft. Madison,

\$11.00; J. W. Berry, Sioux City, \$6.30; A. C. Hawley, Sioux City, \$1.80; E. L. Bowman, Muscatine, 60 cts.; F. E. Rathburn, Cordova, Ill., \$10.10; W. F. Wachendorf, North Buena Vista, \$10.10; N. Trieweliler, Dubuque, 60 cts.; J. F. Walker, Council Bluffs, \$5.10; Troy South, Mondamin, \$5.10; A. Mc-Adams, Keokuk, \$2.40; H. Schmidt, Davenport, \$1.20; J. A. Vogel, Hampton, Ill., \$1.80; L. McAdams, Keokuk, \$7.80; C. Miller, Keokuk, \$6.00; F. Hoover, Keokuk, \$3.00; C. H. Lee, Hampton, Ill.; \$5.10; E. Philleo, Princeton, \$5.10; J. J. Houston, Montrose, \$10.80; G. H. Toole, Ft. Madison, \$10.80; Enoch Moyer, Burlington, \$4.80; Ed. Moyer, Burlington, \$4.80; C. L. Lane, Davenport, 60 cts.; Fred Chow, Dubuque, \$10.10; L. F. May, New Albin, \$33.10; Sam Dickey, Dallas City, Ill., \$12.00; Geo. Rice, Dallas City, Ill., \$12.00; M. Gasaway, Dallas City, Ill., \$12.00; C. E. Dunsworth, Dallas City, Ill., \$11.10; R. R. Engdhard, Ft. Madison, \$5.10; M. D. Creighton, Mediapolis, \$5.10; P. Bruen, River Sioux, \$5.10; P. A. McCabe, Davenport, \$1.20; C. Noyes, Mondamin, \$5.10; W. Harris, Ft. Madison, \$78.00; E. Wagner, Ft. Madison, \$24.00; M. L. Lewis, Mondamin, \$5.10; J. F. Burcham, Mondamin, \$5.10; C. Buhl, Dallas City, \$24.00; C. Shain, Dallas City, Ill., \$12.00; W. H. Kuehl, Eldridge, \$10.10; G. L. Boston, Bettendorf, \$5.10; H. Spring, Bettendorf, \$5.10; A. Kochar, Council Bluffs, \$6.30; P. Hledick, Council Bluffs, \$5.10; A. Avery, Dubuque, \$10.10; G. H. Hellman, Ft. Madison, \$5.10; M. Hay, Pleasant Valley, \$5.10; L. C. Paulsen, Pleasant Valley, \$5.10; W. Crawford, Dallas City, Ill., \$8.40; C. M. Densmore, Sabula, \$5.10; H. Sellbrandt, Davenport, \$2.40; H. Einfeldt, East Moline, \$5.10; M. Fokel, Princeton, \$5.10; E. L. Brown, Bartlett, \$6.90; Chas. Johnson, Montrose, \$8.40; Ed. Hoeing, Montrose, \$5.10; J. J. Vogel, Hampton, Ill.; \$5.10; J. Edelman, Hampton, Ill.; \$11.10; J. S. Tolston, Princeton, \$5.10; T. A. Aten, Rockingham, \$21.20; J. Retzl, Bettendorf, \$1.20; W. Kammerer, Ft. Madison, \$5.10; T. Salladay, Ft. Madison, \$5.10; J. Workman, Sioux City, \$4.80; L. C. Study, McPaul, \$5.10; D. A. Moore, Bartlett, \$5.70; W. Cook, Hampton, Ill., \$5.10; J. L. Sill, East Moline, \$5.10; J. E. Roberts, LeClaire, \$5.10; Fred Clow, Dubuque, \$10.10; G. Putman, Bellevue, \$5.10; L. Kelly, Dubuque, \$5.10; E. Eggers, Bellevue, \$5.10; A. Anderson, Dubuque, \$1.80; F. Fels, Dubuque, 60 cts.; G. A. Grimm, Dubuque, \$1.20; F. Grutz, Dubuque, 60 cts.; J. Studea, Dubuque, 60 cts.; J. Chloupka, Dubuque, 60 cts.; J. W. Thrasher, Ft. Madison, \$5.10; C. Young, Fort Madison, \$7.20; H. A. Schurtzman, North McGregor, \$6.00; M. B. Westgate, Camanche, \$10.20; C. E. Doney, Clinton, \$5.10; E. C. Hammond, Sioux City, \$1.80; A. McCarrison, Bettendorf, \$5.10; L. Noble, Princeton, \$5.10; C. E. Cook, Princeton, \$5.10; L. G. Suiter, LeClaire, \$5.10; H. Miller, Princeton, \$5.10; J. J. Schmitt, Fort Madison, \$5.10; T. M. Hadlock, Fort Madison, \$8.50; F. Courtright, Green Island, \$5.10; J. Hundevard, Sabula, \$1.20; J. Kumpel, Sabula, \$1.80; A. Hinprey, Sabula, 60 cts.; P. Busch, Sabula, \$1.20; W. S. Dula, Salix, \$11.10; J. Fortner, Montrose, \$2.40; H. Lyons, Dallas City, Ill., \$6.00; J. Starkey, Dallas City, \$6.00; S. W. Beckett, Clayton, \$5.10; T. Cossutt, Guttenburg, \$1.20; S. Tinkey, Clayton, \$10.10; F. Muleer, Guttenburg, \$10.10; A. Ran, Guttenburg, \$5.10; R. Buell, Guttenburg, \$7.30; F. Jacobs, Clayton, \$5.10; L. Bretem, Clayton, \$5.10; C. Soles, Clayton, \$5.10; Jas. Ferguson, Clayton, \$10.10; Kelse Gibbs, Spechts Ferry, \$12.30; Wm. Wachendorf, North Buena Vista, \$5.10; Jake Wick, North Buena Vista, \$5.10; Sherman Stant, Dubuque, \$5.10; Oscar Durkee, Bellevue, \$5.10; Chas. Smith, Waupeton, \$5.10; Mate Hill, McGregor, \$5.10; Chas. Olson, McGregor, \$5.10; David Mead, McGregor, \$5.10; G. L. Cardine, McGregor, \$5.10; Geo. W. Weir, McGregor, \$5.10; Bernard Gutings, Ft. Madison, \$6.00; Clyde Fiel, Ft. Madison, \$5.10; Geo. Johnson, Davenport, 60 cts.; Geo. E. Gonyier, Lansing, \$16.50; Henry Saengling, Guttenburg, \$28.60; Beadford Ritter, Modale, \$11.30; Bud Harrison, Council Bluffs, \$10.10; L. Daub, Cal. Junction, \$7.50; J. M. Pardue, Cal. Junction, \$1.20; Joe Blozek, Council Bluffs, \$6.30; Tom Dasta, Council Bluffs, \$6.30; Frank Kochar, Council Bluffs, \$5.10; Jas. Walker, Council Bluffs, \$7.50; John Devency, Council Bluffs, \$5.10; E. M. Cross, Clinton, \$5.10; Christian Behr, Almont, \$6.00; Bill Dwellner, Lyons, \$2.40; Wm. Strut, Lyons, \$4.60; Frank Lang-

